



1000

810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990

15228821.p KGG EAEGGETGSKLV FDFGPMFTA DDLICATAEIMGKSTYTVKALEGDS VAVKRLRERSPK VRKRE KLVVF DYMSRGSPLATFLHARGP DVBNFPIRMSLKGMARLFLYLTHANIHGNLTS SNV  
 15231029.p VAG TASAGGEMCGKLIV EDGFFVTE ADDLICATAEIMGKSTYTVKALEGDS EVAVRLEEKTKRHNLLALAYILGKE EIEGEVTAEGKTRHNLLEKTRHNSAFLHARGP ETIIPETRMKIAKCISRLAHHLHENMINHENLTA SNI  
 AK073061.q KPGSAAEVSEGGEVGKLIV FGGEMARTADDLICATAEIMGKSTYTVKALEGDS IVAWSEAVLCKTRHNLLEKTRHNSAFLHARGP KLLVLDPMNCNSQFLHARAP NTISPETRMTIAKGARLAPLHDMDVHGHLNTA  
 AK103267.q PTSPHFIDSRFHEEPVAFEVYSPDRLVSGDIFFLDSTLVFTAEIDLRAAFLVLRGRSSHOTYKAALQGH VLTIVWMLRVLGLVKHK DPTKEIKKJGIRHNNISMAFYWGKEOE RLIISDVNGDSDAIYIYESTP RRYSRISVSQRKIAIDARCLQFLHNEKGIPPHGKLP INI  
 15238044.q SSSP RFSQDPVMLDVSPFDLACGDFFLDVSLSNITABEELRAAFLVLRGRSSHOTYKAALQGH MTLVWMLRVLGLVKHK DFPAEAKKIGSLKHNTVPLRAYNGKEOE RLLISDVNGDSDAIYIYESTP RRYSRISVSQRKIAIDARCLQFLHNEKGIPPHGKLP TNL  
 83601884.q SSPP DVAHQHHSVLRVHSDKMVGCLHFDLWVHSLTAAEELRAAFLVLRGRSSHOTYKAALQGH ALTIVWMLRVLGLVKHK ESREKKGCGTVKHNLSMCYYWMGKEHE RLIISDVNGDSDAIYIYESTP RRYSRISVSQRKIAIDARCLQFLHNEKGIPPHGKLP SNV  
 15225843.p PSLP KIQNSPDNPITSRQTS MRLDCLNYIFDSSLKLTAAELRAAFLVLRGRSSHOTYKAALQGH VLAIVWMLRVLREGTAKGKK EFAREKKGCGTVKHNLSMCYYWMGKEHE KLIISDVNGDSDAIYIYESTP RNIPIPLSVSDORLNIAIDIAHCLDVLHNERVIPHGNLKS SNV  
 83550415.q SWSPDSGEAYTQEGALARLDDVRSFDLACGDFFLDVSLSNITABEELRAAFLVLRGRSSHOTYKAALQGH DAVLVEPKGEALSVAAILAEVWVAKSSEHLYKAALQGH AVILRFPVWVACALTSDE AIIASAAARIGCAVSHNLVPLIAFVGCRRK ELLIPPFVIAACSPRRFLQ EGIVDQRNIICCKSISBVKLDVHLHGLEKPIIHGNLKTINS  
 15240831.p EEDVIFQGGEDITIOIDILDAPEGVIEKSYTVKAALQGH IRVLFPLPVCTVRSDSKEENGIIELGCVVRHNLVPLGFYACNRRGK LMVIPFEGGSNDSDFTI SGDDESRKINHILRHTICHSKALDHLHUGMOKPIVHGNLK SGN  
 83564404.q SGLVVFQGGENITDIDVILNATQGVVNKAATGTVVKARLAECCG SIEERLRLREGCCNDAE SCAPAVRVRGARDVCRK RLLVCDPFGCNTRHNLVPLGFYACNRRGK LLVCDPFGCNTRHNLVPLGFYACNRRGK SGN  
 15230141.p HLLDQHHSVLRVHSDKMVGCLHFDLWVHSLTAAEELRAAFLVLRGRSSHOTYKAALQGH NARLRLREGTCKRS ILVLLDYLPLNISHDHLLH ES KURKPALNITARERKIALIARAYLHIGQEVPIHNIR S  
 20860017.q SNGGSLCDDGEGDPRISLAKASAEVLRGKVSCTVKALEGDS VAVRGLSALQPGRSK ADRHMLRLACRERBHVHVVHGGQS QGNRPATVANRERKIALIARAYLHIGQEVPIHNIR P  
 lir3\_IRK CGSLPLVGRQIAR TIVLQBESIKRGESEVGRKWREEE VAWKIFSRSRERFWFR EAELYQTVMRHNILGFIADNKNONGTWTQLWLVSDPHEGSDFDYLN RYTIVTVEGMKLAISASCLAHHLIEIVGTOGKPAIAHDLKSKN  
 1ias\_TGFbR GFYENYEKEELGRGVSSVVRRCIHK TKEYAVKILDVTTG GSFSAEEVVSLERATKEVDILRKVSGHNNIQLIDTETNTFFF EKVLSKEKTRKIMRALEVICALHKLINVHDLKPKEN  
 2phk\_Phk

1010 1020 1030 1040 1050 1060 1070 1080 1090 1100 1110 1120 1130 1140 1150 1160 1170 1180

15228821.p LLDENI TAKISPQGSRIMTAAGSSVATAGALCYR APCLSKLKK ANTDVYVSLVIIILELLTCKPSSEALNG VDIPQVAVATVKSEWINEVFLDELLN DVNTMGDELNKALKH VDATPSTRPEACQVQQLCEIIRPEETTATESEPLIDVPEASASTSQ  
 15231029.p LDDEQT NAIHADYGLSRIMTAAGALCYR APDFSKLKK ASAKTDVYVSLVIIILELLTCKPSPEALNG MDIPQVAVATVKSEWINEVFLDELLR ETOSVGDENEINLTKALKH VDPSPAARPEANVVBOLCEIIRPEETTETTPFGSGGEGKDGLGSNE  
 AK073061.q LDDEHS NPKTAADPGLSRIMTAAGALCYR APCLSKLKK ASAKTDVYVSLVIIILELLTCKPSPEALNG MDIPQVAVATVKSEWAFDLR RDGDNPGAGDELVDLKALKH VDQSPSPVRDPARVIRROLECIRGPPEGAGPSEEGGAHGVAAAAGNE  
 AK103267.q ELTGPDLSPLKLVDFGCRERMTSGTAEQHNLGALKR APCLANTAKMPSFADVYAFVIVMEMLRTKSAGDIISGQSGAVDIDT VQMCNRSGRTDCFDRDTIGLEES PRVDELLAISRLCPVNE ERPNMKIVCDDPCSIIV  
 15238044.q ILSSPDNTVRLTDYCVRLRTPGVAECIHNMSALCGYS APCLASASKIPITKSDVYAFVILMELLTRTSAGDIISGQSGAVDIDT VRLCDEGRRMCDIDRDIAGGEF SKGMEADAVAIRILSVN ERPNIRQVBDLTSISA  
 83601884.q LIONASPSAIVTDYSLRIMTPGMAECVLNAGALCGYS PPPEASSSKPCSIKEDVYAFVILLELLTCKIAGEIVCVNDGVVDDIT VRMLAREPRVSECYDRIIUAHSGGAAKAEEDMRIAIRGIRGAS ERPEIRIVFEDLSSLS  
 15225843.p LLKPPELTAHNTDYSLRLLTPEATSEOVLNAAALGYC PPPEASSSKPYPSIKEDVYAFVILLELLTCKIAGEIVCVNDGVVDDIT VLLLVCGNRCDFDPSIVGSQGSRNPFGL DFDLOVALSCISPAP ERPDMDKIVSQUELSRIVLKRTAI  
 83550415.q ILDCDDLNARVADYGLSRIMTAAGALCYR APCLAAKSKPPSFPSKEDVYAFVILLELLTCKIAGEIVCVNDGVVDDIT VRLRVEGRGSDCFDAMASDENQVSVKGKMDVIALRIRFVSE PRGIXKVYEDLSSI  
 AK060657.q ILLDANECKISDFCLVLLINPAGQEMETSAAQCGK APDLIKMRD ATRETDIYSLVVLLEMLACKESAKONTENPRIIIPVFSKNLVLERKISDAFSSDLVRQSKSGKEKNNAFFEELATA CQSPSPSLRPNTEIIKKLEIIAK  
 15240831.p VLLSSSFEPRISDFCILLLNTISAGQEELDVSAAEQYK APDLIKMD -VSKESDVYVSLVIMELVLVSKRPEPINENATGDDEFYLPD FMRNAVUDLHRLSDLYR EILG SDDNLSEECVLYKPOLAMS CQSPSPSLRPNVKEVRLKEIIAKF  
 83564404.q VLVDEWFVARVAYEAVERLIVVARAVG -RADCYR APCLQSRGR -CSERIDVYAFVILLELLTCKIAGEIVCVNDGVVDDIT ELPAVVKAARVEEVIMMEVDAEVARGVRSFAEEGLQAKLAMG CQAPVASRPTMAEVVRQPEEVPRNSRSPSAYSPAERSDAGTPTAAAV  
 15230141.p VLVDDFFFARLTTEGCDKIMVQVADEIMSQAKSDCYK APDLIKMD -CNPRESDVYAFVILLELLTCKIAGEIVCVNDGVVDDIT -MEVFDLEAMGIRSPMEEGVHAKLAMGCAFPVTTVRSPMBEVVKQDSEENPRNR SALYSPTETRSDAETPP  
 20860017.q ILLEDEHGAACVSECVVRYAANIQQSIPQPQRCPSLFL LDRAAAGAG -GGGWHYAAPELASCAGAACARATO ESDVYSEGMVLLLEVVTADNAQDDGNGGGGGDGGEDETMGVKIMLQTAEAPBEPFMAGVQLAMMGEFM  
 lir3\_IRK GMVAHDFTVKLGDFSMRDX ETDXXRKGKGKGLIVVR WMAPESLKDGVFTTSMDM SEVVIWEIS DAEQPYGLSNEDQVLFM DGGYLDQPDNC PERVIDLARMQWQFNPKMWPFF EIVNLLKDLHPSFPEVSFFHSEENK  
 1ias\_TGFbR ILVKKNGTCCIAHDLGCAVRIIDEATDIDTAPNHRVTKRYMAPEVLD SIMMKHIFESFKRDIYAMLVEWETARRCSIGGIREDYQLPYDLDPSVDEMRKVVCEQLR NIINRQWSCEAERVMAKINRECWYANGAARLTALRKKTEQLSQEQIKM  
 2phk\_Phk ILLDDDNIKLTDQFCSCDIDPGEKLRVCGTFSYLAPEEIECSMDNDHPGYCKEVDM SICVIVMYTLLAISPP FWHRKQMLMLRMINISGNYQGSPWDDYSDTVKDILVSRFLVQPKRVTBEEALAHPPFQQY